IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

AMERICAN PATENTS LLC,	
Plaintiff, v.)) CIVIL ACTION No. 6:18-CV-339-ADA
MEDIATEK INC., MEDIATEK USA INC., BROADCOM PTE. LTD., BROADCOM CORPORATION, LENOVO (SHANGHAI) ELECTRONICS TECHNOLOGY CO. LTD., LENOVO GROUP, LTD., NXP SEMICONDUCTORS N.V., NXP B.V., NXP USA, INC., QUALCOMM INCORPORATED and QUALCOMM TECHNOLOGIES, INC.,	JURY TRIAL DEMANDED O O O O O O O O O O O O O
Defendants.	

DEFENDANTS QUALCOMM INCORPORATED'S AND QUALCOMM TECHNOLOGIES, INC.'S ANSWER, AFFIRMATIVE DEFENSES, AND COUNTERCLAIMS TO PLAINTIFF'S ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Defendants Qualcomm Incorporated and Qualcomm Technologies, Inc. (collectively, "Qualcomm"), by and through their undersigned counsel, hereby respond to the Original Complaint for Patent Infringement ("Complaint") filed by Plaintiff American Patents LLC ("American Patents"). For the sake of convenience, Qualcomm incorporates the headings appearing in the Complaint. Qualcomm does not admit any allegation made in, or inference suggested by, such headings, and specifically denies the same. Qualcomm denies all allegations in the Complaint that are not expressly admitted below.

PARTIES

- 1. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 1, and therefore denies same.
 - 2. Qualcomm is without sufficient knowledge or information to form a belief as to the

truth or falsity of the allegations of paragraph 2, and therefore denies same.

- 3. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 3, and therefore denies same.
- 4. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 4, and therefore denies same.
- 5. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 5, and therefore denies same.
- 6. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 6, and therefore denies same.
- 7. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 7, and therefore denies same.
- 8. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 8, and therefore denies same.
- 9. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 9, and therefore denies same.
- 10. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 10, and therefore denies same.
- 11. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 11, and therefore denies same.
- 12. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 12, and therefore denies same.
- 13. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 13, and therefore denies same.

- 14. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 14, and therefore denies same.
- 15. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 15, and therefore denies same.
- 16. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 16, and therefore denies same.
- 17. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 17, and therefore denies same.
- 18. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 18, and therefore denies same.
- 19. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 19, and therefore denies same.
- 20. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 20, and therefore denies same.
- 21. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 21, and therefore denies same.
- 22. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 22, and therefore denies same.
- 23. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 23, and therefore denies same.
- 24. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 24, and therefore denies same.
 - 25. Qualcomm is without sufficient knowledge or information to form a belief as to the

truth or falsity of the allegations of paragraph 25, and therefore denies same.

- 26. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 26, and therefore denies same.
- 27. Qualcomm admits that Qualcomm Incorporated is a Delaware corporation, and that Prentice Hall Corp. System, located at 211 E. 7th Street Suite 620, Austin, Texas 78701 is a registered agent for service for certain purposes. Qualcomm denies any remaining allegations in paragraph 27.
- 28. Qualcomm admits that Qualcomm Technologies, Inc. is a Delaware corporation and that Corporation Service Company d/b/a CSC-Lawyers Incorporated Service Company, located at 211 E. 7th Street, Suite 620, Austin, Texas 78701, is a registered agent for service for certain purposes. Qualcomm denies any remaining allegations in paragraph 28.
 - 29. Qualcomm denies the allegations of paragraph 29.
 - 30. Qualcomm denies the allegations of paragraph 30.
 - 31. Qualcomm denies the allegations of paragraph 31.
 - 32. Qualcomm denies the allegations of paragraph 32.
 - 33. Qualcomm denies the allegations of paragraph 33.

JURISDICTION AND VENUE

- 34. Qualcomm admits that this is an action alleging infringement of United States patents arising under 35 U.S.C. §§ 271, 281, and 284-85. Qualcomm further admits that this Court has subject matter jurisdiction over patent actions generally under 28 U.S.C. §§ 1331 and 1338(a). Qualcomm denies any remaining allegations of paragraph 34.
- 35. For purposes of this action only, Qualcomm admits that it is subject to this Court's personal jurisdiction. With regard to the remaining allegations against Qualcomm, Qualcomm

denies those allegations, including that Qualcomm has committed any acts of patent infringement, either in this District or otherwise. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 36. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 36, and therefore denies same.
- 37. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 37, and therefore denies same.
- 38. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 38, and therefore denies same.
- 39. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 39, and therefore denies same.
- 40. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 40, and therefore denies same.
- 41. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 41, and therefore denies same.
- 42. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 42, and therefore denies same.
- 43. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 43, and therefore denies same.
- 44. For purposes of this action only, Qualcomm admits that venue is proper in this District. Qualcomm further admits that it has a place of business in this District at 9600 N. Mopac, Ste 900, Stonebridge Plaza II, Austin, Texas 78759. With regard to any remaining allegations of

paragraph 44, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement, either in this District or otherwise.

BACKGROUND

- 45. Qualcomm denies American Patents' characterization of the patents-in-suit, and any alleged technology disclosed therein. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the remaining allegations of paragraph 45, and therefore denies same.
- 46. Qualcomm denies American Patents' characterization of the state of the art prior to the patents-in-suit, and denies any remaining allegations of paragraph 46.
- 47. Qualcomm denies American Patents' characterization of the patents-in-suit, and any alleged technology disclosed therein. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the remaining allegations of paragraph 47, and therefore denies same.
- 48. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 48, and therefore denies same.

COUNT I

DIRECT INFRINGEMENT OF U.S. PATENT NO. 6,964,001

- 49. Qualcomm admits that the face of U.S. Patent No. 6,964,001 ("the '001 Patent") states that the United States Patent and Trademark Office issued the '001 Patent on November 8, 2005, and that the title of the '001 Patent is "On-Chip Service Processor." Qualcomm denies the remaining allegations of paragraph 49, including that the '001 Patent was duly and legally issued.
- 50. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 50, and therefore denies same.

- 51. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 51, and therefore denies same.
- 52. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 52, and therefore denies same.
- 53. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 53, and therefore denies same.
- 54. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 54, and therefore denies same.
- 55. Qualcomm admits that it has offered for sale the Snapdragon 410E and Snapdragon 650 series processors. Qualcomm denies the remaining allegations of paragraph 55.
- 56. With regard to the allegations in paragraph 56 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 57. With regard to the allegations in paragraph 57 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 58. With regard to the allegations in paragraph 58 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient

knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 59. With regard to the allegations in paragraph 59 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 60. With regard to the allegations in paragraph 60 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 61. With regard to the allegations in paragraph 61 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 62. With regard to the allegations in paragraph 62 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
 - 63. With regard to the allegations in paragraph 63 against Qualcomm, Qualcomm

denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 64. With regard to the allegations in paragraph 64 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 65. With regard to the allegations in paragraph 65 against Qualcomm, Qualcomm admits that it did not have notice of the '001 Patent prior to the filing of this action. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 66. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 66, and therefore denies same.
- 67. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 67, and therefore denies same.
- 68. With regard to the allegations in paragraph 68 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

69. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 69, and therefore denies same.

COUNT II

DIRECT INFRINGEMENT OF U.S. PATENT NO. 7,836,371

- 70. Qualcomm admits that the face of U.S. Patent No. 7,836,371 ("the '371 Patent") states that the United States Patent and Trademark Office issued the '371 Patent on November 16, 2010, and that the title of the '371 Patent is "On-Chip Service Processor." Qualcomm denies the remaining allegations of paragraph 70, including that the '001 Patent was duly and legally issued.
- 71. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 71, and therefore denies same.
- 72. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 72, and therefore denies same.
- 73. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 73, and therefore denies same.
- 74. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 74, and therefore denies same.
- 75. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 75, and therefore denies same.
- 76. Qualcomm admits that it has offered for sale the Snapdragon 410E and Snapdragon 650 series processors. Qualcomm denies the remaining allegations of paragraph 76.
- 77. With regard to the allegations in paragraph 77 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient

knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 78. With regard to the allegations in paragraph 78 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 79. With regard to the allegations in paragraph 79 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 80. With regard to the allegations in paragraph 80 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 81. With regard to the allegations in paragraph 81 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
 - 82. With regard to the allegations in paragraph 82 against Qualcomm, Qualcomm

denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 83. With regard to the allegations in paragraph 83 against Qualcomm, Qualcomm admits that it did not have notice of the '371 Patent prior to the filing of this action. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 84. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 84, and therefore denies same.
- 85. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 85, and therefore denies same.
- 86. With regard to the allegations in paragraph 86 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 87. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 87, and therefore denies same.

COUNT III

DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,239,716

88. Qualcomm admits that the face of U.S. Patent No. 8,239,716 ("the '716 Patent")

states that the United States Patent and Trademark Office issued the '716 Patent on August 7, 2012, and that the title of the '716 Patent is "On-Chip Service Processor." Qualcomm denies the remaining allegations of paragraph 88, including that the '716 Patent was duly and legally issued.

- 89. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 89, and therefore denies same.
- 90. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 90, and therefore denies same.
- 91. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 91, and therefore denies same.
- 92. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 92, and therefore denies same.
- 93. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 93, and therefore denies same.
- 94. Qualcomm admits that it has offered for sale the Snapdragon 410E and Snapdragon 650 series processors. Qualcomm denies the remaining allegations of paragraph 94.
- 95. With regard to the allegations in paragraph 95 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 96. With regard to the allegations in paragraph 96 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient

knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 97. With regard to the allegations in paragraph 97 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 98. With regard to the allegations in paragraph 98 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 99. With regard to the allegations in paragraph 99 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 100. With regard to the allegations in paragraph 100 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
 - 101. With regard to the allegations in paragraph 101 against Qualcomm, Qualcomm

denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 102. With regard to the allegations in paragraph 102 against Qualcomm, Qualcomm admits that it did not have notice of the '716 Patent prior to the filing of this action. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 103. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 103, and therefore denies same.
- 104. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 104, and therefore denies same.
- 105. With regard to the allegations in paragraph 105 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 106. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 106, and therefore denies same.

COUNT IV

DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,996,938

107. Qualcomm admits that the face of U.S. Patent No. 8,996,938 ("the '938 Patent")

states that the United States Patent and Trademark Office issued the '938 Patent on March 31, 2015, and that the title of the '938 Patent is "On-Chip Service Processor." Qualcomm denies the remaining allegations of paragraph 107, including that the '938 Patent was duly and legally issued.

- 108. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 108, and therefore denies same.
- 109. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 109, and therefore denies same.
- 110. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 110, and therefore denies same.
- 111. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 111, and therefore denies same.
- 112. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 112, and therefore denies same.
- 113. Qualcomm admits that it has offered for sale the Snapdragon 410E and Snapdragon 650 series processors. Qualcomm denies the remaining allegations of paragraph 113.
- 114. With regard to the allegations in paragraph 114 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 115. With regard to the allegations in paragraph 115 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement.

 With regard to the allegations against other Defendants, Qualcomm is without sufficient

knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 116. With regard to the allegations in paragraph 116 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 117. With regard to the allegations in paragraph 117 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 118. With regard to the allegations in paragraph 118 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 119. With regard to the allegations in paragraph 119 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
 - 120. With regard to the allegations in paragraph 120 against Qualcomm, Qualcomm

admits that it did not have notice of the '938 Patent prior to the filing of this action. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 121. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 121, and therefore denies same.
- 122. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 122, and therefore denies same.
- 123. With regard to the allegations in paragraph 123 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 124. Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of the allegations of paragraph 124, and therefore denies same.
- 125. With regard to the allegations in paragraph 125 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement, indirectly or otherwise. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 126. With regard to the allegations in paragraph 126 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement, indirectly or otherwise. With regard to the allegations against other Defendants, Qualcomm is

without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

- 127. With regard to the allegations in paragraph 127 against Qualcomm, Qualcomm denies those allegations, including that Qualcomm has committed any acts of patent infringement, indirectly or otherwise. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 128. With regard to the allegations in paragraph 128 against Qualcomm, Qualcomm denies those allegations. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 129. With regard to the allegations in paragraph 129 against Qualcomm, Qualcomm denies those allegations. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 130. With regard to the allegations in paragraph 130 against Qualcomm, Qualcomm denies those allegations. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.
- 131. With regard to the allegations in paragraph 131 against Qualcomm, Qualcomm denies those allegations. With regard to the allegations against other Defendants, Qualcomm is without sufficient knowledge or information to form a belief as to the truth or falsity of those allegations, and therefore denies same.

JURY DEMAND

Qualcomm admits that this paragraph contains a demand for jury trial to which no response is required.

PRAYER FOR RELIEF

Qualcomm specifically denies any factual assertions contained in the prayer for relief and further denies that American Patents is entitled to any relief sought in its prayer for relief.

QUALCOMM'S AFFIRMATIVE DEFENSES

Without any admission as to the burden of proof, and subject to its responses above, Qualcomm asserts the following defenses, upon information and belief, in response to the allegations of the Complaint. Regardless of how such defenses are listed herein, Qualcomm undertakes the burden of proof only as to those defenses that are deemed affirmative defenses as a matter of law. Qualcomm expressly reserves the right to amend or raise additional defenses pursuant to any docket control order or as additional information becomes available through further investigation and discovery.

First Affirmative Defense (Non-Infringement)

Qualcomm has not infringed and does not infringe, directly, indirectly, literally or by the doctrine of equivalents, or in any other manner any valid and enforceable claim of the '001, '371, '716, and/or '938 Patents. For example, and without limitation, asserted claim 5 of the '001 Patent requires an "on-chip logic analyzer" and "means to align said signals propagated through said probe lines." However, the accused products identified in the Complaint do not meet these claim limitations, either literally, or under the doctrine of equivalents. Similarly, asserted claim 7 of the '371 Patent requires a "service processor unit" that is "adapted to perform capture and analysis of system operation signals." However, the accused products identified in the Complaint do not meet

this claim limitation, either literally, or under the doctrine of equivalents. Likewise, asserted claim 1 of the '716 Patent requires an "analysis engine" that is "configured to align signals received from said probe lines during normal system operation." However, the accused products identified in the Complaint do not meet this claim limitation, either literally, or under the doctrine of equivalents. Finally, claim 1 of the '938 Patent requires an "analysis engine." However, the accused products identified in the Complaint do not meet this claim limitation, either literally, or under the doctrine of equivalents.

Second Affirmative Defense (Invalidity)

One or more claims of the '001, '371, '716, and/or '938 Patents are invalid for failure to satisfy one or more of the requirements for patentability set forth in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 101, 102, 103, and/or 112. For example, and without limitation, asserted claim 5 of the '001 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,624,479, 5,809,037, 5,905,738, and/or 6,182,247. Similarly, asserted claim 7 of the '371 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,624,479, 5,809,037, and/or 5,905,738. Likewise, asserted claim 1 of the '716 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,544,311, 5,624,479, 5,809,037, 5,905,738, 6,182,247, and/or 6,618,775. Finally, asserted claim 1 of the '938 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,624,479, 5,809,037, 5,905,738, 6,182,247, and/or 6,618,775.

Third Affirmative Defense (Prosecution History Estoppel)

By reason of statements, representations, admissions, concessions, arguments, omissions and/or amendments made by and/or on behalf of the applicants during the prosecution of the applications that led to the issuance of the '001, '371, '716, and '938 Patents, American Patents'

claims of patent infringement are barred, in whole or in part, by the doctrine of prosecution history estoppel and/or disclaimer.

Fourth Affirmative Defense (Statutory Limit on Damages)

American Patents' claims for damages and/or costs are statutorily limited by 35 U.S.C. §§ 286-287. Specifically, on information and belief, any claim for pre-suit damages is barred, in whole or in part, for failure to comply with the marking and notice requirements of 35 U.S.C. § 287.

Fifth Affirmative Defense (Express License, Implied License, and Patent Exhaustion)

American Patents' claims are barred, in whole or in part, by express license agreements and/or under the doctrines of implied license, or patent exhaustion. More specifically, American Patents' claims for damages for infringement are limited or entirely foreclosed to the extent that allegedly infringing components and/or products are supplied, directly or indirectly, to Qualcomm by an entity or entities having a license to the '001, '371, '716, and/or '938 Patents, or are imported, sold by, offered for sale by, made by, or made for, any entity or entities having express or implied licenses to the '001, '371, '716, and/or '938 Patents. Moreover, American Patents' claims are precluded under the doctrine of patent exhaustion.

Sixth Affirmative Defense (Equitable Defenses)

American Patents' claims are barred, in whole or in part, by the doctrines of waiver, implied waiver, acquiescence, equitable estoppel, unclean hands and/or other equitable remedies.

Seventh Affirmative Defense (Government Use)

To the extent that any accused product has been used or manufactured by or for the United

States Government, American Patents' claims and demands for relief are barred by 28 U.S.C. § 1498.

Reservation of Remaining Defenses

Qualcomm reserves all defenses under Rule 8(c) of the Federal Rules of Civil Procedure, the Patent Laws of the United States, and any other defenses, at law or in equity, which may now exist or in the future be available based on discovery and other factual investigation in the case.

QUALCOMM'S COUNTERCLAIMS

1. This is an action seeking declaratory judgements of non-infringement and invalidity of U.S. Patent No. 6,964,001 ("the '001 Patent"), U.S. Patent No. 7,836,371 ("the '371 Patent"), U.S. Patent No. 8,239,716 ("the '716 Patent"), and U.S. Patent No. 8,996,938 ("the '938 Patent").

THE PARTIES

- 2. Counterclaimant Qualcomm Incorporated and Qualcomm Technologies, Inc. ("Qualcomm") are Delaware corporations with their principal place of business at 5775 Morehouse Dr., San Diego, California 92121.
- 3. Upon information and belief, Counterclaim Defendant American Patents LLC ("American Patents") is a Texas limited liability company with its principal place of business at 2325 Oak Alley, Tyler, Texas 75703.
- 4. American Patents has submitted to the personal jurisdiction of this Court by bringing the present action against Qualcomm.
- 5. This action arises under the Patent Laws of the United states, 35 U.S.C. §§ 100, et seq., and the Declaratory Judgments Act, 28 U.S.C. §§ 2201 and 2202, based on an actual justiciable controversy between Qualcomm and American Patents. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331, 1338(a) and 2201.

6. To the extent venue is proper in the underlying patent infringement action, venue is proper here as to these Counterclaims under 28 U.S.C. §§ 1391 and 1400(b). However, Qualcomm reserves the right to move to transfer venue in the underlying patent infringement action to a more convenient judicial district irrespective of the allegations in these Counterclaims.

FIRST COUNTERCLAIM

(Declaratory Judgment of Non-Infringement of the '001 Patent)

- 7. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-6 above.
- 8. There exists an actual case or controversy between Qualcomm and American Patents concerning the alleged infringement of the '001 Patent by virtue of American Patents' Complaint and Qualcomm's Answer and Affirmative Defenses thereto.
- 9. Qualcomm has not infringed and does not infringe, directly or indirectly, literally or under the doctrine of equivalents, any claim of the '001 Patent.
- 10. For example, and without limitation, asserted claim 5 of the '001 Patent requires an "on-chip logic analyzer" and "means to align said signals propagated through said probe lines." However, the accused products identified in the Complaint do not meet these claim limitations, either literally, or under the doctrine of equivalents.
- 11. Qualcomm therefore seeks a declaration from this Court that Qualcomm has not infringed and does not infringe any claim of the '001 Patent.

SECOND COUNTERCLAIM

(Declaratory Judgment of Invalidity of the '001 Patent)

12. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-11 above.

- 13. There exists an actual case or controversy between Qualcomm and American Patents concerning the validity of the '001 Patent by virtue of American Patents' Complaint and Qualcomm's Answer and Affirmative Defenses thereto.
- 14. One or more claims of the '001 Patent are invalid for failure to meet one or more of the requirements for patentability set forth in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 101, 102, 103, and/or 112.
- 15. For example, and without limitation, asserted claim 5 of the '001 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,624,479, 5,809,037, 5,905,738, and/or 6,182,247.
- 16. Qualcomm therefore seeks a declaration from this Court that one or more of the claims of the '001 Patent are invalid.

THIRD COUNTERCLAIM

(Declaratory Judgment of Non-Infringement of the '371 Patent)

- 17. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-16 above.
- 18. There exists an actual case or controversy between Qualcomm and American Patents concerning the alleged infringement of the '371 Patent by virtue of American Patents' Complaint and Qualcomm's Answer and Affirmative Defenses thereto.
- 19. Qualcomm has not infringed and does not infringe, directly or indirectly, literally or under the doctrine of equivalents, any claim of the '371 Patent.
- 20. Similarly, asserted claim 7 of the '371 Patent requires a "service processor unit" that is "adapted to perform capture and analysis of system operation signals." However, the accused products identified in the Complaint do not meet this claim limitation, either literally, or

under the doctrine of equivalents.

21. Qualcomm therefore seeks a declaration from this Court that Qualcomm has not infringed and does not infringe any claim of the '371 Patent.

FOURTH COUNTERCLAIM

(Declaratory Judgment of Invalidity of the '371 Patent)

- 22. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-21 above.
- 23. There exists an actual case or controversy between Qualcomm and American Patents concerning the validity of the '371 Patent by virtue of American Patents' Complaint and Qualcomm's Answer and Affirmative Defenses thereto.
- 24. One or more claims of the '371 Patent are invalid for failure to meet one or more of the requirements for patentability set forth in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 101, 102, 103, and/or 112.
- 25. For example, and without limitation, asserted claim 7 of the '371 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,624,479, 5,809,037, and/or 5,905,738.
- 26. Qualcomm therefore seeks a declaration from this Court that one or more of the claims of the '371 Patent are invalid.

FIFTH COUNTERCLAIM

(Declaratory Judgment of Non-Infringement of the '716 Patent)

- 27. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-26 above.
- 28. There exists an actual case or controversy between Qualcomm and American Patents concerning the alleged infringement of the '716 Patent by virtue of American Patents'

Complaint and Qualcomm's Answer and Affirmative Defenses thereto.

- 29. Qualcomm has not infringed and does not infringe, directly or indirectly, literally or under the doctrine of equivalents, any claim of the '716 Patent.
- 30. For example, and without limitation, asserted claim 1 of the '716 Patent requires an "analysis engine" that is "configured to align signals received from said probe lines during normal system operation." However, the accused products identified in the Complaint do not meet this claim limitation, either literally, or under the doctrine of equivalents.
- 31. Qualcomm therefore seeks a declaration from this Court that Qualcomm has not infringed and does not infringe any claim of the '716 Patent.

SIXTH COUNTERCLAIM

(Declaratory Judgment of Invalidity of the '716 Patent)

- 32. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-31 above.
- 33. There exists an actual case or controversy between Qualcomm and American Patents concerning the validity of the '716 Patent by virtue of American Patents' Complaint and Qualcomm's Answer and Affirmative Defenses thereto.
- 34. One or more claims of the '716 Patent are invalid for failure to meet one or more of the requirements for patentability set forth in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 101, 102, 103, and/or 112.
- 35. For example, and without limitation, asserted claim 1 of the '716 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,544,311, 5,624,479, 5,809,037, 5,905,738, 6,182,247, and/or 6,618,775.
 - 36. Qualcomm therefore seeks a declaration from this Court that one or more of the

claims of the '716 Patent are invalid.

SEVENTH COUNTERCLAIM

(Declaratory Judgment of Non-Infringement of the '938 Patent)

- 37. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-36 above.
- 38. There exists an actual case or controversy between Qualcomm and American Patents concerning the alleged infringement of the '938 Patent by virtue of American Patents' Complaint and Qualcomm's Answer and Affirmative Defenses thereto.
- 39. Qualcomm has not infringed and does not infringe, directly or indirectly, literally or under the doctrine of equivalents, any claim of the '938 Patent.
- 40. For example, and without limitation, claim 1 of the '938 Patent requires an "analysis engine." However, the accused products identified in the Complaint do not meet this claim limitation, either literally, or under the doctrine of equivalents.
- 41. Qualcomm therefore seeks a declaration from this Court that Qualcomm has not infringed and does not infringe any claim of the '938 Patent.

EIGHTH COUNTERCLAIM

(Declaratory Judgment of Invalidity of the '938 Patent)

- 42. Qualcomm re-alleges and incorporates by reference the allegations in paragraph 1-41 above.
- 43. There exists an actual case or controversy between Qualcomm and American Patents concerning the validity of the '938 Patent by virtue of American Patents' Complaint and Qualcomm's Answer and Affirmative Defenses thereto.
 - 44. One or more claims of the '938 Patent are invalid for failure to meet one or more

of the requirements for patentability set forth in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 101, 102, 103, and/or 112.

- 45. For example, and without limitation, asserted claim 1 of the '938 Patent is anticipated and/or rendered obvious by U.S. Pat. Nos. 5,624,479, 5,809,037, 5,905,738, 6,182,247, and/or 6,618,775.
- 46. Qualcomm therefore seeks a declaration from this Court that one or more of the claims of the '938 Patent are invalid.

PRAYER FOR RELIEF

WHEREFORE, Qualcomm prays that the Court enter judgment in its favor and against American Patents as follows:

- A. Declaring that the claims of the '001, '371, '716, and/or '938 Patents have not been and are not being infringed by Qualcomm;
- B. Declaring that the claims of the '001, '371, '716, and/or '938 Patents are invalid;
 - C. Denying all relief that American Patents seeks in its Complaint;
- D. Awarding Qualcomm its expenses and costs in accordance with Rule 54(d) of the Federal Rules of Civil Procedure;
- E. Finding this case to be exceptional under 35 U.S.C. § 285 and awarding Qualcomm its costs and attorneys' fees; and
 - F. Awarding Qualcomm any other relief that the Court deems just and proper.

Dated: February 8, 2019 Respectfully submitted,

By: /s/ Gilbert A. Greene

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COUNSEL FOR QUALCOMM INCORPORATED AND QUALCOMM TECHNOLOGIES, INC.

CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure and Local Rule CV-5, I hereby certify that all counsel of record who have appeared in this case are being served on this day of February 8, 2019, with a copy of the foregoing via the Court's CM/ECF system.

/s/ Gilbert A. Greene
Gilbert A. Greene